

DUGAN PRODUCTION CORP.

P.O. Box 420, Farmington, NM 87499

Phone #(505) 325-1821

AUTHORIZATION FOR EXPENDITURE

Drill and complete Mesa Verde - Dakota

WELL NAME AND NUMBER: Mona Lisa 2		Date: 9/30/97
LOCATION: 1620' fsl & 1850' fel, S14-T26N-R7W, Rio Arriba Co. NM		
298 - TANGIBLES		
01 Surface Casing - 390 ft. of 8-5/8" 24 lb.		3,400
02 Prod. Casing - 6300 ft. of 4-1/2" 10.5 lb. & 700 ft. of 11.6 lb.		28,400
04 Tubing - 7000 ft. of 2-3/8" 4.7 lb.		17,500
06 Packer and Tubing Equipment		0
07 Wellhead Equipment		5,000
08 Valves & Fittings		1,500
09 Production Unit & Treaters		7,000
10 Tank Battery		4,000
11 Pumping Unit & Prime Mover		0
12 Rods, Bottom-hole Pump, Aux. Equipment		0
13 Misc. Tangible Equipment		0
14 Well Hookup		5,000
15 Gas Lines & Installation		2,000
16 Pipeline Installation		13,000
TOTAL TANGIBLES		\$86,800
299 - INTANGIBLES		
30 Survey Archeologist		1,500
31 Location Damages		0
32 Road & Location Construction		3,500
33 Water & Gas Lines		0
40 Contract Drilling		115,500
41 Daywork		0
43 Drill Stem Test & Cores		0
44 Mud Logging		3,000
45 Open Hole Logging		10,000
46 Rental Tools		0
47 Casing Float Equipment & Centralizer		5,000
48 Trucking		5,000
49 Mud		0
50 Water- Drilling Oper.		0
51 Casing Crew & Power Tongs		2,000
52 Miscellaneous		0
53 Testing Tubular Goods		0
54 Tool & Equipment Repair		0
55 Company & Contract Labor, Roustabouts		0
56 Supplies		0
60 Cementing Surface Casing		3,500
61 Cementing Production Casing		18,000
70 Completion Rig		15,000
71 Perf. & Cased Hole Logging		5,000
72 Acidizing		0
73 Fracturing		90,000
74 Tank Rental		2,000
75 Trucking - Completion		3,000
76 Water - Completion		7,000
77 Rental Tools - Completion		0
78 Clean-up Location		1,500
79 Power Swivel, Pump & Pit Rental		0
80 Contract Service & Labor - Completion		0
90 Supervision - Administrative		1,000
91 Supervision - Legal		0
92 Supervision - Field		4,200
TOTAL INTANGIBLES		\$295,700
10 % Contingency and Taxes		38,000
TOTAL WELL COST		\$420,500

APPROVALS:

Dugan Production Corp.

John Alexander

Date:

9/30/97

NMOCD Case Nos. 11897 & 11899

January 8, 1998

Dugan Production Corp.

Date:

Exhibit No. *4*